on the selected size of data blocks 810_1-810_N (e.g., 8×8, 4×4 having a larger N value or another grouping of elements). However, it is contemplated that the data set may comprise other types of data, as described above, without departing from the spirit and scope of the invention.

IN THE CLAIMS

Following is a complete set of claims as amended with this Response. This complete set of claims excludes cancelled claims 1 and 13-15, cancelled without prejudice, and includes revised claims 2-3 and 6.

1   1.   Cancelled.

2.   (Amended) The method of claim 6 further comprising:

repeatedly performing arithmetic operations on signal values associated with different regions of the data set to produce a plurality of resultant signal values;

determining sign bits associated with the plurality of resultant signal values; and

providing the sign bits as the pseudo-random number sequence.

1   3.   (Amended) The method of claim 6, wherein the generating of the pseudo-random
2   number sequence comprises:
3   computing a mean signal value for a first region of the data set;
4   computing a mean signal value for a second region of the data set;
5   performing an arithmetic operation on the mean signal value of the first region and the
6   mean signal value of the second region to produce a resultant signal value;
7   determining a sign bit of the resultant signal value; and
8   providing the sign bit as a portion of the pseudo-random number sequence.

1   4.   The method of claim 3, wherein the performing of the arithmetic operation
2   includes computing a difference between the mean signal value of the first region and the mean
3   signal value of the second region.

1   5.   The method of claim 4, wherein each region of the data set includes a predefined
2   image within the frame.

6.   (Amended) A method for improving detection of a watermark, comprising:

generating a pseudo-random sequence of numbers based on data associated with a data set;

producing the watermark by (i) computing a data block having an amplitude, (ii) computing a secondary data set, each pixel of the secondary data set having a predetermined signal value, and (iii) multiplying the pseudo-random number sequence, the amplitude and the secondary data set to produce a result operating as the watermark; and

embedding the watermark into the data set.

7.   The method of claim 6, wherein the amplitude for the watermark is computed through adjustment of a plurality of parameters including frame differences.

8.   A method for extracting a watermark from a video sequence, comprising:

receiving the video sequence having a first frame embedded with a watermark; and

recovering the watermark within the first frame through analysis of intensity differences between the first frame of the video sequence and a second frame of the video sequence.

9.   The method of claim 8, wherein prior to recovering the watermark, the method further comprises:

computing a pseudo-random number sequence using the random number generator seed.

10.   The method of claim 9, wherein the recovering of the watermark includes:

computing a sum for products of (i) differences between watermarked intensities of the first frame and the second frame of the video sequence and (ii) corresponding elements of the pseudo-random number sequence.

11.   The method of claim 10, wherein the recovering of the watermark further includes:

computing a products of (i) a mean value for the differences between watermarked intensities of the first frame and the second frame of the video sequence and (ii) a sum of the pseudo-random number sequence.

12.   The method of claim 11, wherein the recovering of the watermark further
includes:

subtracting (i) the product of the mean value for the differences between watermarked
intensities of the first frame and the second frame of the video sequence and the sum of the
pseudo-random number sequence from (ii) the sum of products of the differences between
watermarked intensities of the first frame and the second frame of the video sequence and the
corresponding elements of the pseudo-random number sequence.

13.   Cancelled.

14.   Cancelled.

15.   Cancelled.